

CLAIMS

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~~1. In a video on demand system for supplying video data to a plurality of subscriber receivers via a program delivery network, the improvement comprising:~~

- ~~a. A data base storage system containing a video on demand program;~~
- ~~b. A temporary video storage memory;~~
- ~~c. A transaction server responsively coupled to said data base storage system, said temporary video storage memory, and said plurality of subscriber receivers whereby one of said plurality of subscriber receivers requests a particular video on demand program from said transaction server and said transaction server spools said particular video on demand program from said data base storage to said temporary video storage memory; and~~
- ~~d. A plurality of video servers responsively coupled to said transaction server and said plurality of subscriber receivers via said program delivery network wherein a one of said plurality of video servers is assigned by said transaction server to stream said spooled particular video on demand program from said temporary video storage memory to said one of said plurality of subscriber receivers via said program delivery network.~~

2. The video on demand system of claim 1 wherein said transaction server further comprises a transaction gateway operating in a middleware environment and a video server frame and steam spooling program responsively coupled to said transaction gateway via said middleware environment.

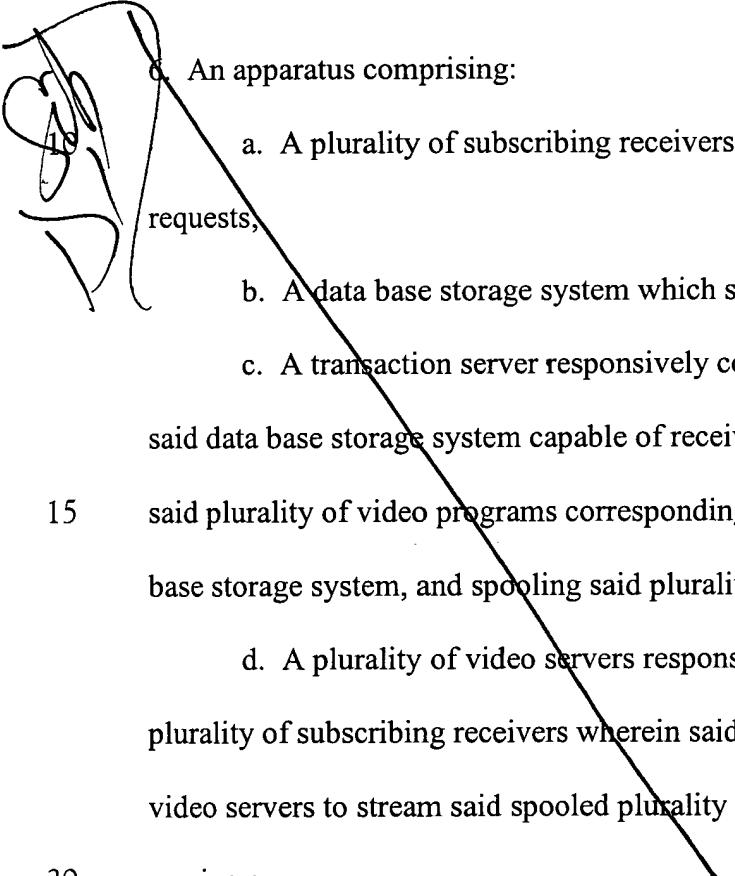
3. The video on demand system of claim 2 further comprising a mainframe computer platform hosting said transaction server responsively coupled to said one of said plurality of video servers

and said subscriber receiver.

4. The video on demand system of claim 3 wherein said mainframe computer platform further comprises a Unisys mainframe computer system.

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5. The video on demand system of claim 4 wherein said transaction server spools said video on demand program in the MPEG-2 format.

6. An apparatus comprising:

a. A plurality of subscribing receivers each capable of providing a plurality of service

10 requests;

b. A data base storage system which stores a plurality of video programs;

c. A transaction server responsively coupled to said plurality of subscribing receivers and said data base storage system capable of receiving said plurality of service requests, accessing

15 said plurality of video programs corresponding to said plurality of service requests from said data base storage system, and spooling said plurality of video programs in response thereto; and

20 d. A plurality of video servers responsively coupled to said transaction server and said plurality of subscribing receivers wherein said transaction server assigns one of said plurality of video servers to stream said spooled plurality of video programs to said plurality of subscribing receivers.

7. An apparatus according to claim 6 wherein said transaction server further comprises a subscriber account whereby each of said plurality of subscribing receivers is charged for corresponding ones of said plurality of service requests.

8. An apparatus according to claim 7 wherein said transaction server further comprises a transaction gateway operating in a commercial middleware environment.

9. An apparatus according to claim 7 wherein said plurality of spooled video programs further
5 comprises MPEG-2.

10. An apparatus according to claim 9 wherein said transaction server further comprises a
Unisys computer system.

10 11. A video on demand system comprising:

a. Means for storing a plurality of video programs;

b. Plurality of means for generating a plurality of different requested video on demand
signals;

c. Means responsively coupled to said generating means and said storing means for

15 identifying a number of said plurality of video programs stored within said storing means
corresponding to said plurality of different requested video on demand signals;

d. Means responsively coupled to said identifying means and said storing means for
spooling said corresponding number of said plurality of video programs which said identifying
means identifies ; and

20 e. A plurality of means responsively coupled to said spooling means and said receiving
means for streaming said spooled number of said plurality of video programs corresponding to
said plurality of different requested video on demand signals to said plurality of generating
means wherein said spooling means assigns one or said plurality of streaming means to stream
said spooled number of said plurality of video programs to said plurality of generating means.

12. A video on demand system according to claim 11 wherein said plurality of generating means further comprises a subscriber box.

13. A video on demand system according to claim 12 wherein said identifying means further 5 comprises a transaction gateway.

14. A video on demand system according to claim 13 wherein said identifying means further comprises means for processing subscriber transactions.

10 15. A video on demand system according to claim 14 wherein said identifying means further comprises a Unisys mainframe computer system.

16. A method of providing video on demand services comprising:

a. Storing a plurality of video programs in a video storage facility;

b. Receiving a video on demand request from a subscriber at a transaction server;

c. Determining a one of said plurality of video programs corresponding to said video on demand request;

d. Spooling said one of said plurality of video programs corresponding to said video on demand request from said video storage facility into a temporary storage facility;

20 e. Assigning one of a plurality of video servers responsively coupled to subscriber to stream said one of said plurality of video programs corresponding to said video on demand request to said subscriber; and

f. Streaming said spooled video program from said temporary storage facility by said assigned video server to said subscriber.

17. A method according to claim 16 further comprising:

a. Pausing said streaming in response to a pause signal from said subscriber to said

transaction server.

5 18. A method according to claim 16 further comprising:

a. Reversing said streaming in response to a reverse signal from said subscriber to said

transaction server.

19. A method according to claim 16 further comprising:

10 a. Fast forwarding said streaming in response to a fast forward from said subscriber to

said transaction server.

20. A method according to claim 16 wherein said processing step further comprises:

a. Performing subscriber accounting to enable billing said subscriber for said video on

15 demand request by said transaction server.